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ABSTRACT

This document builds upon the work of the short-range planning committee of the Florida Educational Leaders Forum, "A Proposal to Enhance Educational Excellence in Florida Education Through the 1990s," by providing a blueprint to extend educational planning into the 21st century. The goals of Florida's educational system for the 21st century correspond to "The Sunshine Report," a product of the House Speaker's Advisory Committee on the Future. These goals include an education that trains every individual to live and work in and use the benefits of technology in an information society; teaches every individual to work and live in an ever-changing world society; emphasizes an appreciation of humanity's cultural and artistic accomplisments; prepares every individual for his/her role as a parent or child care provider; and encourages individual responsibility for the importance of health, fitness, and leisure in a well-rounded life. In addition, education should assure each individual: the opportunity to develop operative skills in computation, reading, speaking, writing, and listening; knowledge of basic information in natural, physical, and social sciences; positive attitudes toward participatory citizenship and social justice; and the ability to reason and solve problems. Finally, postsecondary education should develop closer ties to the K-12 public school system in any effort to restructure Florida's educational delivery systems. (JAM)

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D R A F T

INVESTING IN FLORIDA'S FUTURE

GOALS OF EDUCATION IN THE 21ST CENTURY

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INVESTING IN FLORIDA'S FUTURE

GOALS OF EDUCATION IN THE 21ST CENTURY

FORWARD

Three years ago representatives of all segments of the education community came together to discuss the impact of changes brought on by education reform of the early 1980s and to begin discussions about the impact of anticipated growth upon schools in Florida. These representatives determined the need for a "forum" where leaders of the education community could achieve consensus on important issues facing education but even more importantly they discovered the need for a "forum" where members could gather information, share ideas and formulate plans about the future of education within the context of today's changing world.

After its initial meeting at Wakulla Springs in 1985 the group became known as the Florida Educational Leaders Forum. The Forum's membership encompasses the diversity of the education community and includes representatives from school boards, school superintendents, school administrators, teacher unions, parent teacher associations, teacher educators and college of education deans. The Forum also has representatives from the Florida Department of Education, community colleges, vocational education and exceptional education.

The Forum divided its work into short range planning and long range planning. During 1986 and 1987 the Forum collected state and national demographic data along with data on the status of schools, legislative initiatives and proposals dealing with education needs to the year 2000.

The short range planning committee used this information to develop a report entitled "A Proposal to Enhance Educational Excellence in Florida Education through the 1990's." Following a conference of constituents (comprised of the groups represented by the Forum), that Proposal was published in March, 1987. The "Proposal to Enhance Educational Excellence in Florida Education Through the 1990's" represents the work of the short range planning committee of the Forum and continues to provide a blueprint for planning as we approach the turn of the century.

This document takes the work of the short range committee and continues to build upon those planning efforts to extend thoughtful educational planning into the twenty-first century.

Many organizations have allowed key education leaders to devote time to the Forum's meetings and activities. The members' day to day employers are school boards, colleges and universities across the state along with organizations such as The Florida School Board Association, The Florida Association of School Administrators, FTP-NEA, FEA/United, Florida PTA, Florida Vocational Association, Council for Exceptional Children, Florida Association of Supervision and Curriculum Development and the Florida Department of Education. The Forum thanks the members and their employers for the voluntary hours of time and deliberation devoted to the development of this document.

The Forum could not have been successful in bringing education leaders together without the assistance of Dr. Jack Croghan of the University of Miami. Dr. Croghan provided structure and process for the Forum's work as a whole and facilitated many work sessions in the development of this brochure.

The Forum also acknowledges the work of Claudia Edwards who wrote Investing in Florida's Future: Goals of Education for the 21st Century at the Forum's request.

PROLOGUE

The world society is undergoing such a profound transformation that society's structural, political and cultural systems as we know them today may seem obsolete by the year 2020.

While many will try using trends -- demographic or economic -- to predict the future, few projections hold steady on a "straight-line" basis over such a long period of time. Yet, it seems reasonable that one may be able to identify basic frameworks that are emerging and form a matrix of people's lives in the future.

Social analysis typically proceeds on three different levels -- structural, political and cultural. Structural being the social arrangements rooted in demographic, technological and economic institutions. Political is the internal constellation of forces, as well as the alliances and rivalries within and between nations and the cultural level involves the ideologies, passions, religious identifications and philosophical ideals that give meaning to beliefs. While the three are interdependent, change in one does not necessarily set off consequent changes in all the others.

Examining the constructs of the structural arrangements poses questions to which the political order -- the control system -- must respond. Structural changes are embedded in a world economy while political orders are still national. It is the effort of the nation-state to cope with the strong tides of change that will frame the policy issues of the next thirty years.

The structural changes we face today are characterized by the economic shift to the Pacific Basin, the international division of labor, technological revolution, resources, demographics, and the family. An illustration from the past is the change from an agrarian to an industrial society. At the turn of this century, almost half the population of the United States were born on farms; one-third of the labor force worked on farms. Today fewer than 4 percent of the labor force work on farms and many of these people do not make their living exclusively from farming. The major reason for the change was the hugh increase in agricultural productivity during World War II and after, when the introduction of chemical fertilizers and pesticides raised agricultural productivity between 6 and 9 percent a year. As a result, about 25 million persons left the farms. A large proportion of these were blacks who had been sharecroppers. Sharecropping was virtually eliminated, and blacks moved north into central cities such as Chicago, Saint Louis, Philadelphia, and Los Angelos. As a result of chemical technology, a large number of America's rivers were polluted by the runoff of fertilizers and pesticides. The division of labor and the workforce changed dramatically as did family structure, the demography of the United States and education. In this example one can see how a small "social system" of interlinked changes works and how those changes have driven the policy of this country for decades.

Societies work when the scales of institutions match, particularly economic and political institutions. At a time when these are increasingly out of sync, it is the control arm of society -- the political level -- which must create policy and redesign institutions to keep society functioning.

FLORIDA'S EFFORTS AT FUTURE PLANNING

Florida has demonstrated a strong commitment to future planning by embarking upon a multi-year strategic planning process involving the Legislature, business and community leaders. The work of these leaders has produced a planning map and initiated policy development which will take the State of Florida into the 21st Century.

In the Spring of 1985, Speaker of the Florida House of Representatives, James Harold Thompson appointed Representative Jon Mills as Chair of the Speaker's Advisory Committee on the Future. In addition to Majority Leader Mills, the Committee consisted of 45 prominent citizens from various walks of life brought together to consider the issues and choices facing the State of Florida.

The Committee, working through a set of structured tasks, produced seventy-one long term issues or goals which they believed were critical to the future of the State of Florida. A number of these issues and goals spoke to the importance of Florida's educational system for the future. The Sunrise Report produced by the Committee is essential background reading for anyone interested in understanding the challenges facing Florida in the next 30 years.

Central to the future of Florida is the contribution to be made by it system of education. The Sunrise Report recognizes that, "Florida's most important asset is its people. We must continue to invest, even more, in our youth -- our future citizens who will lead us into the next century."

Among the investments the Committee feels we must make are:

> The preparation of [all] students for a knowledge-based economy
>
> The encouragement of public-private partnerships [in education]
>
> The preparation of citizens to survive economic shifts and changes
>
> The preparation of students to prosper in an increasingly technological society and workplace

Throughout the Report the point is repeatedly made that the future of Florida depends in large degree on the educational performance of its citizens as workers and as members of an informed society. The report stresses that this attention to the education of Floridians must extend not only to the traditional school population, but must begin by including the very young as well as meeting the life-long needs of adults.

The Sunrise Report is a powerful statement of what Florida must do if it is to enter the twenty-first century in control of its destiny and its potential. The final question which the Committee on the Future raises summarizes the issue.

> "The sun will inevitably rise in Florida, but will it be on a tomorrow of our own creation?
> Which tomorrow, Florida?"

The size and scale of the issues education will face are exacerbated by the profound changes in Florida's structural system characterized by unparalleled growth, an evolving economy based upon technology and tourism and scarce resources characterized by stress of the eco-system.

Florida's success in managing change and in maintaining a desirable quality of life for its citizens depends in large part on the success of the educational system in producing people who are prepared to bring knowledge and skill to Florida's problems. Florida's educational system is currently mismatched with the size and scope of these demands.

Assuming that much of the thoughtful planning of this decade will bring public education into readiness for the turn of the century, we must now extend our thought and policy development to the decades beyond -- to the year 2020. This document is intended to continue the dialogue and to spur additional efforts to restructure Florida's educational system for the future.

A GLANCE AT THE WORLD IN THE YEAR 2020

The most extraordinary change the world will likely undergo in the next 30 years is the shift of the center of economic power to the Pacific Basin. And if indeed that happens, will it also mean a shift in political and military power?

One could speculate on the impact of the reemergence of Japan, and the emergence of China as military powers or the welding of a Eurasian bloc from Germany to to China. Nonetheless the major economic players in the world in 2020 will be the East Asian countries, the United States and the U.S.S.R.

This historic change will undoubtedly drive changes in the multiple centers of manufacturing and centers of finance along with the internationalization of capital. While the international economy becomes increasingly integrated -- maybe even an international monetary system -- we will see increased national political fragmentation. The national political institutions are too big to handle the small problems of life, becoming unresponsive to the variety and diversity of local needs. Yet the institutions are too small to deal with problems of capital flows, demographic tidal waves, commodity imbalances and loss of jobs which will be experienced on an international scale. The interlinking of international structural change with nation-state political and cultural systems points up a mismatch of scale between these societal institutions and their abilities to handle the demands of society in the year 2020.

Another 2020 time bomb is demography -- not just sheer numbers of population (although some project it to be 10 billion) but the problems created by imbalances in the population. It is anticipated that huge urban agglomerations like New York City will continue to grow and in Third World Cities such as Mexico City or Shanghai the population is expected to exceed 30 million per megalopolis.

Yet the more severe of the demography problems is the proportion of young persons to the total population. That proportion is about 22% in the United States but runs 30-40% in Asian countries and as much as 50% in Latin America and Africa.

These population imbalances mean that in the next thirty years, we will see demographic tidal waves sweeping the world. In the heavily weighted countries, this will mean more than a doubling of rates of entry into the labor forces.

Harvard Sociologist Daniel Bell notes, "While capital is able to move freely, most people do not. If jobs are being dispersed around the world, will people follow the jobs?" If not we will see large knots of unemployment in those countries that cannot absorb the rate of entry into the labor force. If so we will see tidal waves of immigration to the countries where jobs exist.

The United States faces challenges reflective of those shaping the world of the future. The U.S. economy is becoming bicoastal with sixteen coastal states containing 42% of the nation's population today. This fact is particularly important for Florida because the population migration to the south and west will begin to slow yet

Florida's growth will continue. The higher growth rate in Florida is due in part to its diversified economy. Florida will be a center for massive exchange of goods and services with other nations as well as the U.S. Meanwhile heartland cities of the U.S. must transform themselves into financial or high-tech concentrations or face continuing decay.

As with the world at large, demography plays an important role in shaping the future of the U.S. and Florida in particular. By 2020 today's "baby boomers" will be the nation's elderly. But the important point to make is the elderly in proportion to the rest of the population. Today people over the age of 85 make up only 9% of the population but by 2020 that figure may grow to as much as 20% of the population. Florida statistics show that about 24% of the people moving to Florida are over 60. When they retire to Florida ninety percent are financially and physically independent but only sixty percent of those who left Florida were. It is obvious that health care needs, transportation and services for the elderly will play an important role in Florida's future. But their fixed incomes, political power and attitudes toward education may play an even more important role in funding issues of the future.

Another important change in the nation's demography is the growth of minority populations. The Hispanic population has grown by about 40% since 1970 and the fertility rate of Hispanic women is 60% higher than the U.S. average. In states such as Texas and California Blacks, Hispanics and Asians will make up the majority of the population by the early 2000s. Florida is not expected to be a "minority majority" that soon. The issue in Florida is not race but class. The class structure of the entire United States is shifting brought on by changes in the economic structure and the family. There are more women in the workforce, divorce rates are high and occur earlier in marriages. These facts along with the scandalous rate of illegitimacy increase the amount of time children spend in single-parent or "blended" families. Black six-year-olds will live almost 60% of their youth with only one parent while a white six-year-old will live 30% of his or her time in a one-parent family. In Florida nearly half the children entering school are "at risk" and we know that half those born but yet to reach school age are considered "at risk."

The growing job classes are managerial and professional and services. But they sort out into a skilled professional and technical class and a service class/underclass with no middle class as we think of it today. The middle class as we have defined it is changing because the anchors used to define the middle class are disappearing. Family break up has led to less real income per household, home ownership is elusive and single family dwellings are more the exception than the rule.

Educational attainments are the cutoff points which determine in which class tomorrow's youth will fall. Blacks and non-Cuban hispanics are at the greatest risk. About thirty-five percent of Hispanics drop out of high school; only 3 percent are employed as professionals. Only 9 percent of blacks and 8 percent of Hispanics have college degrees. In Florida about 21 percent of the state's public school minority population attend college but minorities represent **35 percent** of the public school population. There is also a discrepancy in distribution. Although the black population in Florida is considerably larger than the Hispanic the percentage attending college is almost the same for both groups. In addition black community college enrollment is steadily declining. Despite these figures Florida has an excellent record in the access of minorities and immigrants to well-paying jobs, middle-class incomes and entrepreneurship. Four Florida cities rank in the top 25 cities in the nation for black middle class income. Will we be able to maintain or improve that status if college enrollments continue to reflect the proportions shown above?

Clearly the lack of education attainment may lead to an imbalance in society of "haves" and "have nots" as we have never experienced it before. It becomes imperative that attention and resources are invested in our people through education if we are to maintain a balance of classes within our society.

Administration and governing also take on new proportions as these basic structures of world and the U.S. change. The cost and effectiveness of delivering services will become increasingly difficult and costly. With as many as fourteen levels of government within some states, three thousand counties and fifty thousand school districts there may be a need to aggregate services on a bistate, bicounty, bidistrict or regional basis. Some state and national services may need to decentralized. "De-bureaucratization" will become a necessary trend in the twenty first century allowing flexibility and balance in the delivery of services.

While there has been a trend toward decentralization, placing the authority with states and counties, the trick is how to do it effectively without creating more rigid administrative structures when the issues themselves cross state boundaries. A relevant example is the need for Florida to produce or hire an almost completely new teaching force by the year 2000. While Florida's need is greater than others this is not an isolated need. It is estimated that by 1992 1.3 million **new** teachers will be needed nationwide. Authority for retirement systems and licensing requirements currently rests with individual states. Is it possible that national or state compacts allowing mobility

in retirement benefits and credentials would alleviate a crisis in teacher supply and demand by distributing the available supply to locations of high demand?

If so, it is not too soon to implement such a change because the problem will continue. By 2020 those 1.3 million new teachers of 1992 will be retiring -- if they have stayed in the system for twenty five years.

EDUCATION IN THE 21ST CENTURY

The challenges faced by Florida's educational system have led to many exemplary programs to meet special needs of students. Efforts begun during the eighties to address student enrollment increases, "at risk" students and dropout prevention will need continuation and expansion in the next century. Consider these facts:

1/3 of Florida's younger children are in poverty

Florida ranks 50th in the nation in retention of students to graduation

The schools built to accommodate student enrollment increases in the next 10 years will not be located where the students will live by 2020.

Florida's elderly population may increase to 20% of the whole by 2020

Florida will be a major "exchange network" by 2020 Serving the U.S. and other nations.

Florida's population will be a "minority majority".

Predicting the future is a risky business and perhaps shall remain the domain of psychics and others with extraordinary powers but it is not unrealistic to create a future by looking at what we know now and predicting what the future will look like by comparing "what is" to "what should be" thirty years from now. There need be no mystery to education in the future because we know a great deal about who the citizens of Florida's tomorrow will be as well as who the educational system will be expected to serve.

Preliminary research for this document included a search of the Constitution and School Code of Florida for established goals of education. To our surprise there were none! While many exemplary programs have led to standards of achievement and accountability for Florida schools, no broad goals have been established encompassing the whole range and purpose of schooling.

Educational improvement is a long range proposition requiring substantial and sustained public support. During the 1980s education has enjoyed considerable attention and support from public officials and the citizens of Florida. However, it is unlikely that general claims of "well being" will continue to generate the same level of support as resources become more scarce and the needs of society in general take center stage during Florida's dramatic change and growth.

To make schools markedly more effective, they really have to be markedly different from the way they are now. From architectural design and location to school organization and curriculum schools must be restructured for the 21st century.

Leadership will make the difference in getting Florida from "what is" to "what should be". The purest act of leadership is goal setting. In the context of the educational system of Florida that means that elected policy makers must help the taxpayers of Florida agree upon broad goals of education and then lead the enactment of policy that moves Florida one step at a time to the realization of an educational system prepared to educate tomorrow's citizens. As the Committee on the Future asked, "Which tomorrow, Florida?"

By the year 2020 Florida's communities will be even more diverse. Bulges in population groups (school age and others) will not be evenly distributed. The high tech megalopolis of central Florida will require a different kind of school system than less densely populated ones.

The goals described here will provide the State a blueprint upon which to set standards for student learning and to focus school organization.

Flexible designs in creating the curriculum, staffing, calendar and administration for accomplishing these goals can best be accomplished at the district and school levels.

Much of what is required of an educational system of the future will remain the same as it is today because we know that public education will remain the vehicle for producing a literate citizenry that can uphold the principles of a free democratic society. Yet the structures necessary to

carry out schooling in the future may change. The identified needs to be served by the educational system will be even broader and will require a restructuring of the thinking that drives education policy as well as the structure, finances, and program to match changes in society.

Beyond goal setting state leadership can provide the technology, research, development and support to restructure our thinking and encourage the local customizing of programs to meet the goals of education.

The following discussion offers possible goals of education for the 21st century and some implications for restructuring the system to carry out these goals.

GOALS OF EDUCATION FOR THE 21ST CENTURY

* **AN EDUCATION WHICH PREPARES EVERY INDIVIDUAL FOR A CAREER WHICH OPTIMIZES HIS/HER POTENTIAL AND INSTILLS AN AWARENESS OF THE NEED FOR LIFELONG LEARNING**

Achieving this goal means that we must somehow "predict" what the job market will look like and then produce a curriculum which would support that job market. A disturbing fact is that most labor market forecasts show that less than 25% of new job openings in the near future will require a baccalaureate degree, while somewhere between 50%-75% will require some form of post-secondary technical training. At the same time current forecasts indicate that automation, technology and foreign production may cause elimination of many times more technical and professional jobs as will be created!

Studies suggest that "over-skilling" of the workforce leads to declining job satisfaction and lowered productivity. Yet are we prepared to accept that the role of public education is to teach people how to lead self-fulfilling lives in unfulfilling careers?

Before assuming such an unappealing scenario for education we need to consider that the rapid growth of low skill, low paying service jobs is a natural and probably temporary consequence of the economic transformation taking place.

The graduates of public education in 2020 will be entering a society which has been in transition for 30 to 40 years. This fact dictates that a post-industrial curriculum is developed which provide students with skills and knowledge necessary to pursue "sequential careers" and to seek "life-span" learning opportunities. The average citizen will change jobs/careers more than five times in his/her lifetime.

The skills inherent in such a curriculum are not rote knowledge but process, interpersonal and reasoning skills. They are related to application and learned behavior rather than acquisition of facts.

* **AN EDUCATION THAT PREPARES EVERY INDIVIDUAL TO LIVE AND WORK IN AND TO USE THE BENEFITS OF TECHNOLOGY IN AN "INFORMATION SOCIETY"**

By the turn of the century 2/3 of the American population will be computer users and information consumers. Today these are the people who seek information outside their closest circle of friends, family and colleagues to help them better make decisions. But the important group here is the 1/3 of the American population who are now and will continue to be non-information consumers. This is a significant disadvantage because information consumers are not only more knowledgeable and adaptable to change but according to the U.S. Surgeon General they are healthier and live longer. The information "have nots" will become further isolated from others in society and will exhibit dysfunctions ranging from poorer health to lower incomes.

The question is how to design a curriculum and a school based technology equal to the challenge. Computer aided instruction and hardware in schools are not answers but opportunities in addressing this need. While computers certainly hold great promise as educational tools both instructionaly and administratively, much is yet to be done.

As the growing share of the population acquire computers they will be arming themselves with access to alternatives of traditional education. It is estimated that educational software sales will exceed textbook sales in the next several years. Yet the development, screening, and instructional use of software appropriate for classroom use is not on par with that being used and purchased for home.

Research indicates that the tangible benefits of computer aided instruction are limited. Elementary school applications have been particularly effective in facilitating rote learning. However, the development of sophisticated software and computer-based instructional models limit widespread use especially at secondary and collegiate levels.

In educational experiments it has been shown that micro-computer networks are far more cost effective than a central computer with remote terminals. Careful consideration must be given to the method of capital investment and curricular use in automating schools. As with private industry, it appears that integrated use of technology is 100% more effective than incremental utilization.

* **AN EDUCATION THAT PREPARES EVERY INDIVIDUAL TO WORK AND LIVE IN AN EVER CHANGING WORLD SOCIETY**

This document draws a sketch of world society in 2020. The potential for change in these next thirty years is almost beyond comprehension. The age and race cohorts of the population are expected to unbalanced. Society's structural constructs will be tested, stretched and reformed to shape the world of tomorrow. For better or worse today's children will have witnessed the struggle. Will they enter a transformed society ready to tackle the problems of thirty more years ahead or will they inherit a society in dysfunction? We cannot know for sure but what we do know is that it will be different from today.

Beyond intelligence and the ability to reason, adaptability is probably the most significant trait that separates the human race from the rest of the animal kingdom. But what good will that trait do us if, for example, our planet is unsuitable for human habitation.and our future scientists have been unable to create any alternatives or worse yet we have no scientists?

Current efforts in educational reform have attempted change in curriculum but have neglected to develop a curriculum for change. The failure of these reform proposals to specify such a curriculum content may not be all bad because, as with all creative endeavors, failure is a necessary component of innovation and ultimate success.

The Wright Brothers certainly did not achieve flight without first experiencing failure. It is just such a spirit of innovation which is leading educators today to create effective programs and models which will shape public education for the next half century.

If we are successful, tomorrow's students will have learned to deal with change and plan their futures in school/community programs which blend the learning of both interpersonal and problem-solving skills with the benefits of technology in laboratory classrooms and work-study programs via computer networks.

* **AN EDUCATION THAT EMPHASIZES AN APPRECIATION OF HUMANITY'S CULTURAL AND ARTISTIC ACCOMPLISHMENTS**

Most of life is not spent in school or even in the workplace. Quality of life is connected to one's ability to understand, appreciate and enjoy the history, development, achievement and creativity of mankind.

With the world shrinking through technological accomplishment it will be all the more important that students of the 21st century understand the languages, customs and culture of other people. The changes will demand global literacy. Furthermore in a United States where non-white, non-English speaking people will make up a considerable portion of the population, it will be increasingly important for citizens of the future to be able to recognize racial bigotry and understand the need for tolerance. If indeed we are faced with other issues such as a more clearly defined "caste system", scarce natural resources, or environmental crises the very prosperity of America may rest with the citizens' desire to preserve and protect humanity.

Too often subjects represented in this area take a "back seat" to core academics and when staff and program cuts are made, music and art are the first to go. Schools of the 21st century will need an integrated curriculum that blends the aesthetic with the academic.

* **AN EDUCATION THAT ENCOURAGES INDIVIDUAL RESPONSIBILITY FOR THE IMPORTANCE OF HEALTH, FITNESS, AND LEISURE IN A WELL ROUNDED LIFE.**

Health issues dramatically affect student ability to learn. Chemical abuse, AIDS, student violence, eating disorders and teenage pregnancy are sidelining many of our kids before they have a chance to become productive citizens. Once again this is an area in which public schools cannot succeed without the help. The use of public/private partnerships, and interagency programs directed at these problems for both parents and students can help schools be more effective in health education as well as academic programs.

While many of these issues are controversial, communities can no longer deny the consequences lack of information plays in the lives of students. Curricular decisions can be controlled by local school boards and can reflect prevailing community values, but on the larger scale priority must be placed on funding programs, providing staff development and creating the community collaboration necessary for these programs to succeed.

Beyond the known health issues of today, we know that the population, particularly in Florida will be older and mostly non-white. The need for consumer knowledge regarding health care and life-planning will be greater than ever before. As people live longer they will need skills to remain in the work force longer, they will need information about health care costs and facilities as they become disabled and they will need judgment in evaluating alternatives and planning fulfilling lives. Clearly today it is the minority and immigrant populations that suffer most from lack of access to adequate health care or the ability to pay for insurance. The results are lowered productivity in society, high mortality and in the context of education -- more "at risk" students.

* **AN EDUCATION THAT ASSURES EACH INDIVIDUAL THE OPPORTUNITY TO DEVELOP:**

  OPERATIVE LEVELS OF SKILL IN COMPUTATION, READING, SPEAKING, WRITING, LISTENING;

  KNOWLEDGE OF BASIC INFORMATION IN NATURAL, PHYSICAL, AND SOCIAL SCIENCES;

  POSITIVE ATTITUDES TOWARD PARTICIPATORY CITIZENSHIP AND SOCIAL JUSTICE;

  AND THE ABILITY TO REASON AND SOLVE PROBLEMS

Despite a return to basics in public education over the past decade, the American rate of illiteracy is alarming. The dropout problem may be the single greatest contributing factor considering that between 1/4 and 1/3 of America's youth leave school without a high school diploma.

While this goal represents a core curriculum for public education it would seem that almost as important as the **content** is the **organization and delivery of instruction** to maximize individual student success. To turn this tide schools must become partners with the community at large involving parents, business and other community agencies in the coordinated delivery of services.

Within schools much can still be done to reach the students who are likely to have difficulty with basic competency. Careful attention must be given to providing early diagnosis and intervention. It is becoming a well known fact that those three and four year olds who have preschool experiences perform better in elementary school and while providing widespread public preschool programs is an expensive proposition, the cost of not doing so becomes even more expensive when these students reach adulthood.

80% of all prisoners in the U.S. are high school dropouts. Each prisoner in jail for a year costs the state (and nation) about $24,000. Aside from the criminal risk and cost to the state and nation, when you consider the potential cost of unemployment, welfare, and the "at risk" children produced by this underclass of citizens the economic consequence to society is compounded for generations to come.

Another key aspect of the delivery of instruction, for the "at risk" student is teacher - student ratio, particularly in the elementary grades. Studies and projects in Illinois, Indiana, Tennessee and Texas have demonstrated the effectiveness of classes with fifteen students. Some of the results of small class size indicate:

- **Achievement scores were higher.**
- **Discipline problems were identified and resolved more quickly, leading to fewer interruptions.**
- **Students showed more consideration for one another.**
- **Teachers had more time to teach both one on one and in depth instruction.**

- **More individualized instruction led to a reduced need for reteaching.**

- **Greater interaction among students increased mutual understanding.**

We know that direct instruction is effective in teaching "basics" and in rote learning. However, in order to develop higher order thinking skills teachers must use other methods of instruction and the curriculum must have content and tools which encourage critical thinking, develop skill in problem solving and allow students to apply these skills to relevant life or work situations.

At the secondary level a more intensive effort must be made to select and monitor the course and sequence of instruction for students. Students who have had previous failures, need remediation for basics or are not college bound often miss necessary academic training. In particular programs must be developed which strengthen ties between vocational instruction and academic instruction. Vocational students take fewer academic courses than other high school students. Students in vocational classes spend 60 percent of their time using basic skills -- reading, speaking, listening, writing and mathematics. However, vocational teachers spend only about three percent of their time teaching basic competencies.

Teaching tomorrow's students "responsible and participatory citizenship" will be increasingly difficult because in many ways those definitions as applied today may take on completely new meaning by 2020. Responsible citizenship on the grandest scale will include knowledge and concern for the interdependence of our world society and on smaller scales a sense of community where ones lives and works.

It is safe to assume that no one is going to do away with our democratic form of government and that certainly a school curriculum should include the power and importance politics, government and voting holds in maintaining a free and independent country.

The next technological revolution will likely include include advances which will transform other parts of society, explore new frontiers in space and biology as well as lead to new materials. Many advances are underway today such as laser disks replacing fiber optics or experiments with superconductivity that may transform energy use.

The curricula for sciences today is out of sync with the rapid pace of development and will require a tremendous revamping by the turn of the century. Once a state of the art curriculum is developed, the questions of the next decades will be those of application and uses for our technological and scientific prowess. What of genetic research, the development of new drugs or new agricultural products? Students will need skills to understand the relationships of the sciences and technology to human life and the world's eco-systems. But more importantly they will need judgement to make the hard decisions about application of knowledge and its moral consequences.

* **AN EDUCATION THAT PREPARES EVERY INDIVIDUAL FOR HIS/HER ROLE AS A PARENT OR CHILD CARE PROVIDER**

Achieving this goal means that Florida must demonstrate a commitment to its citizens beginning with pre-natal stages and continuing throughout life.

One third of the State's younger children are in poverty

More than half the youngsters coming to school are "at risk" due to poor prenatal and postnatal care; non-English speaking homes; no preschool

More than 20% of the State's population will be over age 65 in 2020, living longer and remaining in the work force longer.

It is likely that there is a high correlation between the 1/3 children in poverty and "at risk" when entering school and the 1/3 who never complete high school.

Meeting this goal also means developing a citizenry committed to investment in Florida's human resources over the course of a lifetime.

If Florida is to continue to meet today's challenges while restructuring for the future, schools must not be thought of as an isolated institution. For instance, the demands of society in 2020 will require Florida to meet the needs of the very young along with the elderly. We need the support and financial help of the elderly to continue to meet the financial requirements of the educational system. Both the young and the old need extended health care programs.

Many "at risk" students are born to parents who are themselves children. To stop the alarming rate of teenage pregnancy, illegitimacy and children born "at risk" we must have community based programs for values development and parental education. Much of a child's development takes place in the first five years of life. There is a great need for community based services in health care. Prenatal care is the first critical step in assuring healthy babies but from birth there is a need for pediatric care, dental, hearing and vision screening before age five.

According to 1985 data an estimated 138,000 children are without supervised child care each day. Supervised child care can be linked with preschool programs shared be public schools, private industry and other government agencies.

Throughout the K-12 program student learning can be enhanced by providing before and after school programs which may provide enrichment, physical development or the opportunity to expand art and music skill. For older students career awareness, job training, counseling and community responsibility programs can be shared with the business sector and civic groups.

Senior citizens can both benefit and contribute to public education as volunteers, employees and as learners. Often instruction is enhanced by lowering the student - adult ratio in the classroom so that the professionals can devote more time to active instruction. Schools can provide community based instruction to Seniors and private corporations can provide space, access for employees and other valuable help.

Clearly this is a challenge that public education cannot face alone. Meeting the challenge requires the establishment of at least two formalized relationships with public schools.

1. Public/Private Partnerships to address the dichotomy of interests between Florida's very young and the elderly.

2. Effective and operative Interagency collaboration to provide services for parents, children and the elderly.

Programs which could be implemented through these channels span the arena from parent education through joint services during K - 12 schooling to extended learning opportunities and joint use of facilities.

POSTSECONDARY EDUCATION IN FLORIDA

The goals of education as described here contemplate an inclusive system of public schools - preschool through university. Each component of such a public education system has a valuable role to play in the fulfillment of Florida's overall goals. Private schools will also continue to contribute in the educational avenues available to Florida citizens.

However, the role of the postsecondary education network will also have a role in supporting Florida's growth and strategic planning efforts throughout the next thirty years. From preparing workers to research and development postsecondary education in Florida will remain big and vital. Florida institutions enroll about 500,000 students and half of them are part-time. Our ability to reach and serve the nontraditional student will be increasingly important after the turn of the century. The difficulty in continuing to serve the part-time student needs is, of course , financing. While they pay only part of a full-time tuition they require full-time services while on campus such as parking space or books in the library.

Florida's sophisticated research institutions are key to the emerging but fragile high-tech economy of the State. Care must be given to continue funding for these institutions to remain vital in current sciences and technology.

Yet perhaps the greatest challenge facing postsecondary education is to develop stronger ties to the K-12 public school system. There is great opportunity to seize the growing market -- minority youth -- by developing effective programs from them now.

In the near future Florida institutions will serve as a national model for developing programs for adult and continuing education aimed at returning dropouts and the elderly.

Citizens in Florida must come to think of education as a single system beginning with pre-school and continuing throughout life.

RESTRUCTURING EDUCATION'S DELIVERY SYSTEMS

Fulfillment of the goals discussed here will require curriculum and program changes as well as the restructuring of education's organizational and delivery vehicles. What follows are some possible changes in these structures as part of educational reform.

Calendar/Scheduling

By 2020 some public schools will operate on a year-round calendar.

The school day will be defined to include supervised before and after school programs to accommodate the schedules of working parents and non-traditional learners.

Year round scheduling will offer more flexible programs to accommodate individual learners and family style.

Staffing

There will be a greater exchange of school and community workers and volunteers in order to provide students more realistic learning experiences through cooperative business and community programming.

More part-time and adjunct faculty will be a regular part of the school program to enhance the curriculum, to allow for more flexible instructional groupings and to provide special expertise.

Staffing patterns will be more differentiated and will focus on student learning needs. Administrative, instructional and noninstructional tasks will be shared by the faculty. The "faculty" may include other governmental agency employees, retirees, private sector employees and college faculty and students. Adult/student ratios will be lower and focused upon student needs, in smaller instructional groupings.

There will be greater flexibility and mobility for instructional personnel to move within the state and between states to meet student enrollment peaks and valleys. The nature of such flexibility may range from credentialing to retirement and benefits.

The organization of instruction and the assignment of personnel will be based on school goals and student/teacher styles. Curriculum will be more integrated. Teachers will be encouraged to share instruction and to lend expertise to other facets of the school and district program.

Administration/Governance

While the principal will continue to be a key leadership figure in effective schools, schools will operate in a shared decision making/shared leadership mode.

Schools will have greater autonomy in goal setting and determining day to day functioning and programming. Accountability will be school-based.

Schools will involve a wider range of parents, community groups and business in school decisions.

Elected school boards will remain as the chief district policy makers but school districts will move to appoint rather than elect professionally qualified superintendents.

There will be more formalized networks of public/private partnerships to meet jointly established needs.

Interagency networks will focus on coordinated delivery of services through public schools.

State policy will provide direction and set goals but will allow local flexibility and innovation in carrying them out.

The State Department of Education will become less a compliance agency and more a source for enabling partnerships, creating interagency networks and providing research and development for local technical assistance. This new role will require a decentralization of programs and services.

Education will be separated from other major policy concerns of Florida by the appointment of a Board of Education replacing those education policy functions now carried out by the State Cabinet.

Staff Development

Master inservice planning will focus around staffing and career patterns of the schools within the district.

Inservice content will be broadened to provide skills in interpersonal relationships, team building, strategic planning and decision making.

Delivery of inservice will be largely school based and designed to meet that school's needs (including noninstructional, part-time or volunteer personnel). Teaching personnel and school leaders will play a larger role in the planning and delivery of inservice.

The link between schools and universities will be closer sharing responsibility for teacher training, preservice experiences, inservice and designing school programs.

Facilities/Technology

Schools will be designed around a central learning core with satellite facilities for particular enrollment needs.

Modular units which can be moved will become more popular.

Space sharing with businesses and community agencies or organizations will be common and necessary.

There may be several "schools" within one structure.

Acquisition of computers, use of teleconferencing and video equipment will change the design of classroom space.

Computer networks will provide new opportunities for meeting special learner needs and will supplement classroom instruction.

The use of computers for recordkeeping, design and productions of instructional materials will free up valuable time for active instruction.

Evaluation and purchase of educational software will require as much time as textbook selection today.

Student access to data bases and computer mainframes from the classroom and home will continually affect the curriculum content.

Finance

Florida's commitment to long range planning will allow us to "catch up" on much needed resources and to create a sound revenue base for education.

A revised tax system will broaden the revenue base for schools beyond property tax and allow the use of impact fees, services tax and/or individual income tax.

School funding formulas will be developed to equalize revenue sources for all districts and provide full funding for mandated programs.

Long range planning will allow adequate time for and more realistic implementation schedules.

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